FUSE HOLDER AND MOUNTING RACK, SUBMERSIBLE SINGLE-PHASE, 15.5 kV, 100 AMPERE

1. General

1.1 This specification covers submersible, air insulated single-phase, 15.5 kV, 100 ampere fuse holder and mounting rack for three units.

1.2 The fuse holder shall meet or exceed the material and testing requirements of the latest revision of all applicable standards by ANSI, IEEE, NEMA, except as modified herein.

1.3 The completed unit shall be capable of withstanding internal failure without explosion of fire.

2. Service

This fuse holder is intended for use on a 26.4 GRD-Y/15.2 kV, three-phase, 60 Hertz distribution system.

3. Ratings

The ratings for the integrated fuseholder assembly shall be as follows:

Normal Voltage - phase to ground	15.5 kV
Maximum Design Voltage	15.5 kV
Basic Impulse Insulation Level (BIL)	125 kV
Flashover	200 kV
Continuous Current Rating	100 amperes
Short-Circuit Rating – one second	20,000 amperes, sym.

4. Materials

4.1 The fuse holder tank shall be constructed of 14 gauge 304 stainless steel

4.2 The fuse holder rack shall be constructed of mild steel angle stock and shall be hot dip galvanized.

4.3 Hot dip galvanizing shall meet the requirements of ASTM A 153.

5. Fuse Holder Tank

5.1 The stainless steel tank shall be all welded construction.

5.2 The sides of the fuseholder shall be painted black for improved heat transfer. Paint is not required on the top of bottom of the tank.

5.3 The fuse holder shall be constructed to withstand all pressure buildup during interruption without permanent distortion or damage to any portion of the structure.

5.4 Four mounting tabs shall be provided for securing the fuse holder to the mounting rack.

5.5 A Load break parking stand shall be supplied on each fuse holder.

5.6 A 1/4" NPT half coupling and pipe plug shall be located on the top of the tank for installation of a pressure relief valve by City Light.

6. Grounding Provisions

Each fuse holder shall have a grounding nut, threaded 1/2" x 13 Welded to the front of the tank within 8 inches of the top.

ORIGINATOR	STANDARDS COORDINATOR	STANDARDS SUPERVISOR	UNIT DIRECTOR
Jim S. Horn	Charles L. Shaffer	John C. Skinner	Harold Gray

7. Bushings

7.1 Primary bushings shall be 200 ampere bushing wells. The bushing wells shall be rated 200 amperes and 125 kV BIL and shall meet the requirements of the 15.2 kV version of Figure 3 of ANSI/IEEE 386-95 for 200 A bushing-well interface, 8.3 kV, 15.2 kV, and 21.1 kV.

7.2 Each bushing well shall have a cap to prevent the entrance of moisture or contamination during shipping and storage. The bushings shall be protected against damage during shipping.

8. Operation

8.1 The bayonet access for fuse replacement shall be secured with three cam lock releases which are easily operated with a switch stick.

8.2 The bayonet fuse access shall be interlocked to prevent opening without first removing the elbow connector.

9. Mounting Rack

Top shall slant fifteen degrees out from the mounting surface.

10. Signs and Nameplates

Each fuseholder shall be provided with a stainless steel nameplate indicating the following:

(a) Manufacturer's name and drawing or catalog number for the completed assembly.
(b) Voltage ratings.
(c) Continuous current rating.
(d) Short-circuit ratings.
(e) One line diagram.

11. Guarantee

Any fuse holder failing due to defective design, material, and/or workmanship within 12 months after being energized or 18 months after delivery shall be repaired or replaced at no charge to the City of Seattle Light Department. Any defect in design, material, and/or construction discovered within this period shall be corrected either by repair or replacement on all units furnished on this order by the manufacturer at no charge to the City of Seattle Light Department.

12. Approved Manufacturers

Stock No.	Description	Trayer Engineering Cat. No.
684930	Fuse Holder, 100 Ampere, 1 Phase, 15.5 kV, Submersible, Air Insulated	311ATDOM1 DWG # 000321 REV. C
684933	Rack, Fuse Holder Mounting, 3 Phase, Submersible, Galvanized Steel	HDGR3-10 DWG # 961021 REV. B

Stock Unit: EA